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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,968	11/12/2003	Robert K. Froom	03-217-B	9417

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EXAMINER

DOSTER GREENE, DINNATIA JO

ART UNIT PAPER NUMBER

3743

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,968

Applicant(s)

FROOM, ROBERT K.

Examiner

Dinnatia Doster-Greene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2003 and 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-11, 13-17, 20 and 38-42 is/are rejected.
- 7) ☐ Claim(s) 7, 12, 18, 19 and 21-37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detail Action.

**DETAILED ACTION*****Claim Rejections - 35 USC § 112***

Claims 8, 9 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the phrase "FDA approved foam material" is unclear since FDA approved materials are subject to constant review and removal from the FDA's approval listing. Therefore, a material which is FDA approved today might not be FDA approved tomorrow. Therefore, a person of skill in the art would be unable to ascertain the metes and bounds of the claimed invention due to the constantly changing nature of the FDA approval listing.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, 38, 39 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonardo (U.S. Patent No. 4,782,825) in view of Nuzzo et al. (U.S. Patent No. 4,383,571) and Carr-Stock (U.S. Patent 6,165,148). In Figs. 5-6, Lonardo discloses a planar hand-mounting member 10 formed without a

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thumb. Lonardo also discloses a thumb-mounting member 12. However, Lonardo fails to disclose wherein the hand-mounting member extends beyond the outer dimensions of a human hand and wherein the thumb-mounting member extends beyond outer dimensions of a human thumb and rotates in an arc. Since Lonardo does disclose in Figs. 5-6 that the hand-mounting member almost extends beyond the user's hand, the Office takes the position that it would be obvious to one skilled in the art to extend the splint of Lonardo beyond the user's hand for the purpose of providing additional support to the user's hand, arm and fingers. Furthermore, Nuzzo, which also relates to a splint without a thumb, also discloses a thumb member which extends beyond the user's thumb and rotates in an arc (Nuzzo, Fig. 4). Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the support arm 50 of Lonardo based upon the teaching of Nuzzo for the purpose of providing greater movement and flexibility of the user's thumb during rehabilitation.

Lonardo also fails to disclose slots and straps as recited in the claims. However, Carr-Stock teaches as an example that it is well known in the rehabilitation art to use straps as a means for securing and fastening a device to a user's limb.

Regarding claim 2, Carr-Stock clearly discloses hooking and looping elements used for attaching the restraining straps.

Regarding claim 3, Nuzzo teaches that the thumb-mounting member is lockable in a plurality of positions about a point where the thumb-mounting member is rotatably attached (Fig. 4).

Regarding claim 38, Nuzzo discloses a plurality of notches positioned along arcuate slot 46. Thus, it would have been obvious to one skilled in the art to move the arcuate slot 46 of Nuzzo from the middle of the splint to either side of the splint for the purpose of improving the rotation of the thumb.

Regarding claims 39 and 41-42, Carr-Stock teaches that cover 14 serves as padding so that the knuckles of the user's hand are positioned above the user's fingers (Nuzzo, Fig. 2). Cover 14 is also washable, removable and replaceable (Nuzzo, col. 1, lines 49-67).

Claims 4-6, 10-11, 13-14, 15-17, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lonardo, Nuzzo and Carr-Stock and in further view of Wang (U.S. Patent No. 6,443,918). As discussed above the combination of Lonardo, Nuzzo and Carr-Stock discloses the claimed invention with the exception of an arm-rest portion having a hand-shaped section and an extension section. However, Wang, which also relates to a rehabilitation device, discloses a two-piece orthosis having a hand-section 12 and an arm section 14 which are attached to each other by way of straps. Foam pad 74 is provided as padding to fit within the upper and lower sections of the splint to provide additional comfort. Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the hand splint of the combination of Lonardo, Nuzzo and Carr-Stock with the forearm extension of Wang for the purpose of providing additional comfort to the user's upper arm.

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Regarding claims 10-11, Carr-Stock discloses in col. 1, lines 51-67 a washable, removable and replaceable cover.

Regarding claims 13-14 and 20, Carr-Stock teaches that it is known to employ a variety of slots and hooking and looping portions.

Regarding claims 15-17, Wang also teaches that it is known to use a leaf spring 60 to affix a first portion and a second portion of a splint. Foam pad 74 provides padding for the upper and lower surface of the support platform of the splint.

### ***Allowable Subject Matter***

Claims 7, 12, 18, 19, 21, 22, 23, 24, 25-27, 28, 29, 30, 31, 32, 33, 34, 35-37, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dale (U.S. Patent No. 4,960,114); Carter (U.S. Patent No. 6,094,756); Brink (U.S. Patent No. 4,576,351); Bzoch (U.S. Patent No. 5,718,671); Bodine, Jr. (U.S. Patent NO. 5,060,638).

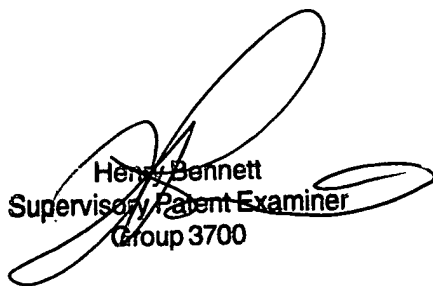
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinnatia Doster-Greene whose telephone number is 571-272-7143. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-271-7143.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ddg



Henry Bennett  
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